



## CCTV 1+4 PE RG 59 Mini

2x0,5 mm<sup>2</sup> + 2 x 0,22 mm<sup>2</sup>



RoHS , REACH & CE Directives

Standards: ISO/IEC 11801, IEC 61156-5

EN 50173-1, EN 50288-10-1; EIA/TIA 568-B



Ambient installation T°  
C range  
-10 + 50 °C



Operating temp.  
-20 + 60 °C



Storage temperature  
range  
-20 + 70 °C



Flame retardant  
IEC 60332-1



Smoke density

### Application:

This hybrid **CCTV 1+4 PE RG 59 Mini 2x0,5 mm<sup>2</sup> + 2 x 0,22 mm<sup>2</sup> cable** is designed for analog video surveillance systems, combining a 75 Ω RG59 mini coaxial cable with four auxiliary power/control conductors in one cable. It is used for: Analog CCTV camera installations (CVBS, AHD, TVI, CVI), Indoor and outdoor surveillance systems (depending on jacket type), Security systems in: Commercial buildings, Residential buildings, Warehouses, Factories, Schools, Hospitals, Parking areas, Industrial facilities.

Cable construction: **1 × RG59 Mini PE coaxial cable**, Transmits the video signal, PE (Polyethylene) dielectric provides stable electrical characteristics and low attenuation; **2 × 0.5 mm<sup>2</sup>** conductors typically used for DC power supply (12 VDC or 24 VAC) to the camera and **2 × 0.22 mm<sup>2</sup>** conductors used for auxiliary functions such as: PTZ camera control (RS-485), Alarm inputs/outputs, Audio transmission, Telemetry or other low-current control signals.

Advantages: Video, power and control in a single cable, Faster and more economical installation, Reduced cable clutter, Reliable video transmission with good shielding, Suitable for long-distance analog CCTV installations. Typical systems: AHD CCTV, HD-TVI CCTV, HD-CVI CCTV, Traditional composite video (CVBS), PTZ camera installations requiring video, power and RS-485 control. This cable is intended for analog HD CCTV systems. It is not recommended for IP/network cameras, which should use Cat5e, Cat6 or Cat6A Ethernet cables with or without PoE

Construction:

|                                                     |                                                                                                      |
|-----------------------------------------------------|------------------------------------------------------------------------------------------------------|
| Video core:<br>cable                                | 1XRG59 Mini 75Ω coaxial                                                                              |
| Inner conductor:<br>wire                            | solid bare od stranded copper                                                                        |
| Insulation:<br>Shield:                              | Foam polyethylene<br>Aluminium-polyester foil<br>and tinned copper braid<br>2x0.50 mm² stranded bare |
| power conductors:<br>copper                         | with PVC insulation.<br>2x0.22 mm² stranded bare                                                     |
| Control conductors:<br>copper                       | with PVC insulation.<br>the RG59 Mini coaxial                                                        |
| Assembly:<br>cable, two power<br>conductors         | conductors and two control<br>are laid up together to form<br>a single<br>composite cable.           |
| Cable shielding:<br>Outer jacket:<br>(PE)<br>Color: | Aluminium-polyester foil<br>UV-resistant Polyethilene<br>black ( RAL 9005)                           |

Core identification:

|                     |                                                                                                                                                                                      |
|---------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Power conductors:   |  red ;  black  |
| Control conductors: |  Yellow;  blue |

Electrical Characteristics:

|                                   |                                       |
|-----------------------------------|---------------------------------------|
| Characteristic Impedance:         | 75 ± 3 Ω                              |
| Capacitance:                      | ≤ 67 pF/m                             |
| Velocity of Propagation (NVP):    | 66–85% (depending on dielectric type) |
| DC Resistance (Inner Conductor):  | ≤ 95 Ω/km                             |
| Shield Resistance:                | ≤ 25 Ω/km                             |
| Operating Voltage:                | Max. 300 V                            |
| Test Voltage:                     | 1.0 kV DC / 1 min                     |
| Power Conductors (2 × 0.50 mm²)   |                                       |
| Conductor DC Resistance (20°C):   | ≤ 39.0 Ω/km                           |
| Insulation Resistance:            | ≥ 100 MΩ·km                           |
| Rated Voltage:                    | 300/300 V                             |
| Test Voltage:                     | 1.5 kV AC / 5 min                     |
| Control Conductors (2 × 0.22 mm²) |                                       |
| Conductor DC Resistance (20°C):   | ≤ 88.0 Ω/km                           |
| Insulation Resistance:            | ≥ 100 MΩ·km                           |
| Rated Voltage:                    | 300/300 V                             |
| Test Voltage:                     | 1.5 kV AC / 5 min                     |

Attenuation of RG59 Mini (Typical)

| Frequency (MHz) | Attenuation (dB/100 m) |
|-----------------|------------------------|
| 10              | ≤ 4.5                  |
| 50              | ≤ 9.5                  |
| 100             | ≤ 13.5                 |
| 200             | ≤ 19.5                 |
| 400             | ≤ 28.0                 |
| 700             | ≤ 38.0                 |
| 1000            | ≤ 46.0                 |

### Mechanical features:

|                                       |                     |
|---------------------------------------|---------------------|
| Overall Cable Diameter                | Approx. 8.0–9.5 mm  |
| Cable Weight                          | Approx. 75–95 kg/km |
| Minimum Bending Radius (Installation) | 10 × Cable Diameter |
| Minimum Bending Radius (Fixed)        | 5 × Cable Diameter  |
| Operating Temperature                 | -30°C to +70°C      |
| Installation Temperature              | -10°C to +50°C      |
| Storage Temperature                   | -20°C to +70°C      |

### Standards

|                       |                            |
|-----------------------|----------------------------|
| Flame retardant:      | EN 60332-1-2               |
| Halogen acid gas:     | EN 60754-1-2               |
| Low Smoke Generation: | EN 61034-2                 |
| RoHS Compliant:       | Yes                        |
| CE Compliant:         | 2014/5/EU, CPR ( 305/2011) |



believed to be correct at the time of publication. When selecting cable accessories, please note that actual cable dimensions may vary due to manufacturing tolerances.

---

**Technical Data Sheet**